

June 5, 1995, now United States Patent No. 5,722,952 (the “‘649 Application”). The ‘649 Application was a co-pending divisional of United States Patent Application Serial No. 08/139,756, filed, October 22, 1993, now U.S. Patent No. 5,489,299 (the “‘756 Application”). The ‘756 Application was a co-pending divisional of United States Patent Application Serial No. 07/913,486, filed on July 15, 1992, now United States Patent No. 5,354,331 (the “‘486 Application”). The ‘830 Application also incorporated by reference the ‘486 Application, now United States Patent No. 5,354,331, into the body of the ‘830 Application.

On Page 2 of the August 13, 2001 Office Action the Examiner stated that Applicant’s substitute specification of April 21, 2000 was not entered because it supposedly did not conform to 37 C.F.R. § 1.125(b) for failing to submit a statement as to lack of new matter, and (2) a properly marked up version of the substitute specification was not supplied.

In response, the Applicant is submitting a substitute specification attached hereto. A marked up version of the specification is also attached. Pursuant to 37 C.F.R. § 1.125(b), the Applicant states that no new subject matter has been included in the substitute specification. This is because the substitute specification contains portions of the originally filed patent application that incorporated by reference U. S. Patent No. 5,354,331 (Substitute Specification, Page 6, Lines 13-14 and Page 12, Lines 12-14). By reference to U.S. Patent 5,354,331, the originally filed disclosure describes the use of a laser to carry out the present invention. The substitute specification has been amended to specifically set forth the material from U.S. Patent 5,354,331 that was previously incorporated by reference. A marked up version of the substitute specification showing amendments

to the original specification has been supplied.

On Page 2 of the August 13, 2001 Office Action the Examiner rejected Claims 31-44 under 35 U.S.C. § 112, first paragraph, stating that the originally filed disclosure did not mention the use of a laser. Applicant respectfully submits that this rejection has now been overcome by the inclusion of originally filed material from U.S. Patent No. 5,354,331 that was previously incorporated by reference.

On Pages 2-3 of the August 13, 2001 Office Action the Examiner rejected Claims 31-39 under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner stated that Claim 31 is indefinite because the term “operable to weaken the sclera” is unclear since this term could encompass gouging the sclera with the laser casing. In response the Applicant has amended Claim 31 to clarify that the laser weakens the sclera “with laser irradiation” as described in the specification. Applicant respectfully submits that this amendment overcomes the rejection of Claim 31 as being indefinite.

On Page 3 of the August 13, 2001 Office Action the Examiner rejected Claims 32-39 as being indefinite because they do not further limit the structure of the claims from which they depend. Applicant respectfully submits that the rejected Claims 32-39 now depend from amended Claim 31 and incorporate the limitations of amended Claim 31. In particular, Claims 32-39 now refer to a laser that weakens the sclera with laser irradiation. Applicant respectfully submits that the amendment of Claim 31 overcomes the rejection of Claim 32-39 as being indefinite.

On Page 3 of the August 13, 2001 Office Action the Examiner rejected Claim 1 for statutory double patenting. In response, the Applicant has cancelled Claim 1.

On Page 3 of the August 13, 2001 Office Action the Examiner rejected Claims 31-44 under 35 U.S.C. § 102(b) as being anticipated by United States Patent No. 4,391,275 to Frankhauser et al. Applicant respectfully traverses this rejection by the Examiner. The Frankhauser patent does not disclose the use of a laser to weaken the sclera of an eye in the region of the ciliary body with laser irradiation in order increase the effective working distance of the ciliary muscle of the eye. Therefore the Frankhauser patent does not anticipate Applicant's invention.

On Page 4 of the August 13, 2001 Office Action the Examiner objected to Applicant's amendment filed on April 21, 2000 under 35 U.S.C. § 132 because it supposedly introduced new matter into the disclosure. The Examiner stated that the added material which was not supported by the original disclosure included Figure 10 and Figure 11. As previously indicated, the supposedly new matter was actually present in the original disclosure by the incorporation by reference of U.S. Patent No. 5,354,331. Figure 10 and Figure 11 clarify the original disclosure but do not add new matter. The matter disclosed in Figure 10 and Figure 11 are supported by the material incorporated by reference from U.S. Patent No. 5,354,331.

Applicant has added new Claim 45 and new Claim 46 to more particularly claim the method of the present invention.

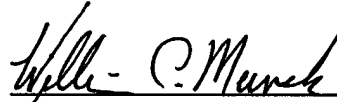
The submitted substitute specification is derived from the specification of the foregoing line of United States patent applications. The submitted substitute specification is directed to teachings

and inventions contemplated by the specifications of this line of United States patent applications. The submitted substitute specification is inherent to the same and no new subject matter has been included in the substitute specification.

The Applicant believes that this Application is in condition for allowance. If any outstanding issues remain, or if the Examiner has any further suggestions for expediting prosecution of this Application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at wmunck@novakov.com.

Respectfully submitted,

NOVAKOV DAVIS & MUNCK, P.C.

A handwritten signature in cursive script, appearing to read "Will - A. Munck", is written over a horizontal line.

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APPENDIX

VERSION MARKED TO SHOW CHANGES MADE

1. through 30. (Cancelled)
31. (Amended) A laser operable to weaken the sclera of an eye in the region of the ciliary body with laser irradiation to thereby increase the effective working distance of the ciliary muscle of the eye.
32. (New) The laser set forth in Claim 31 operable to weaken the sclera of the eye in the region of the ciliary body by abrading the sclera with laser irradiation.
33. (New) The laser set forth in Claim 31 operable to weaken the sclera of the eye in the region of the ciliary body by ablating the sclera with laser irradiation.
34. (New) The laser set forth in Claim 31 operable to weaken the sclera of the eye in the region of the ciliary body by incising the sclera with laser irradiation.
35. (New) The laser set forth in Claim 31 operable to weaken the sclera of the eye in the region of the ciliary body by incising the sclera at select angles with laser irradiation.
36. (New) The laser set forth in Claim 31 operable to weaken the sclera of the eye in the region of the ciliary body by decomposing partially collagen fibers in the sclera.
37. (New) The laser set forth in Claim 31 wherein said laser is one of a carbon dioxide laser, a helium-neon laser, a helium-cadmium laser, an argon ion laser, a krypton ion laser, a xenon laser, a nitrous oxide laser, iodine laser, a holmium doped yttrium-aluminum garnet laser, an excimer laser, a chemical laser, a harmonically oscillated laser, a dye laser, a nitrogen laser, a neodymium laser, an erbium laser, a ruby laser, a titanium-sapphire laser and a diode laser.
38. (New) The laser set forth in Claim 31 wherein said laser uses one of ionizing radiation and non-ionizing radiation to weaken the sclera of an eye in the region of the ciliary body, thereby increasing the effective working distance of the ciliary muscle of the eye.
39. (New) The laser set forth in Claim 31 operable to increase the amplitude of accommodation of the eye.

40. (New) A method of operating a laser to treat one of presbyopia, hyperopia, primary open angle glaucoma and ocular hypertension, said method comprising the step of irradiating the sclera of an eye in the region of the ciliary body to thereby weaken the sclera of the eye and increase the effective working distance of the ciliary muscle of the eye.

41. (New) The method of operation set forth in Claim 41 wherein said step of irradiating the sclera of the eye in the region of the ciliary body further comprises the step of abrading the sclera with laser irradiation.

42. (New) The method of operation set forth in Claim 41 wherein said step of irradiating the sclera of the eye in the region of the ciliary body further comprises the step of ablating the sclera with laser irradiation.

43. (New) The method of operation set forth in Claim 41 wherein said step of irradiating the sclera of the eye in the region of the ciliary body further comprises the step of incising the sclera with laser irradiation.

44. (New) The method of operation set forth in Claim 41 wherein said step of irradiating the sclera of the eye in the region of the ciliary body further comprises the step of decomposing partially collagen fibers in the sclera.

45. (New) A method for increasing the amplitude of accommodation of an eye, the eye having a crystalline lens, a ciliary muscle and a sclera, said method comprising the step of weakening the sclera through laser irradiation in the region of the ciliary body of the eye thereby increasing the effective working distance of the ciliary muscle.

46 (New) A method for increasing the amplitude of accommodation an eye, the eye having a crystalline lens, a ciliary muscle and a sclera, said method comprising the step of weakening the sclera through one of incising and ablating the sclera in the region of the ciliary body of the eye thereby increasing the effective working distance of the ciliary muscle.